

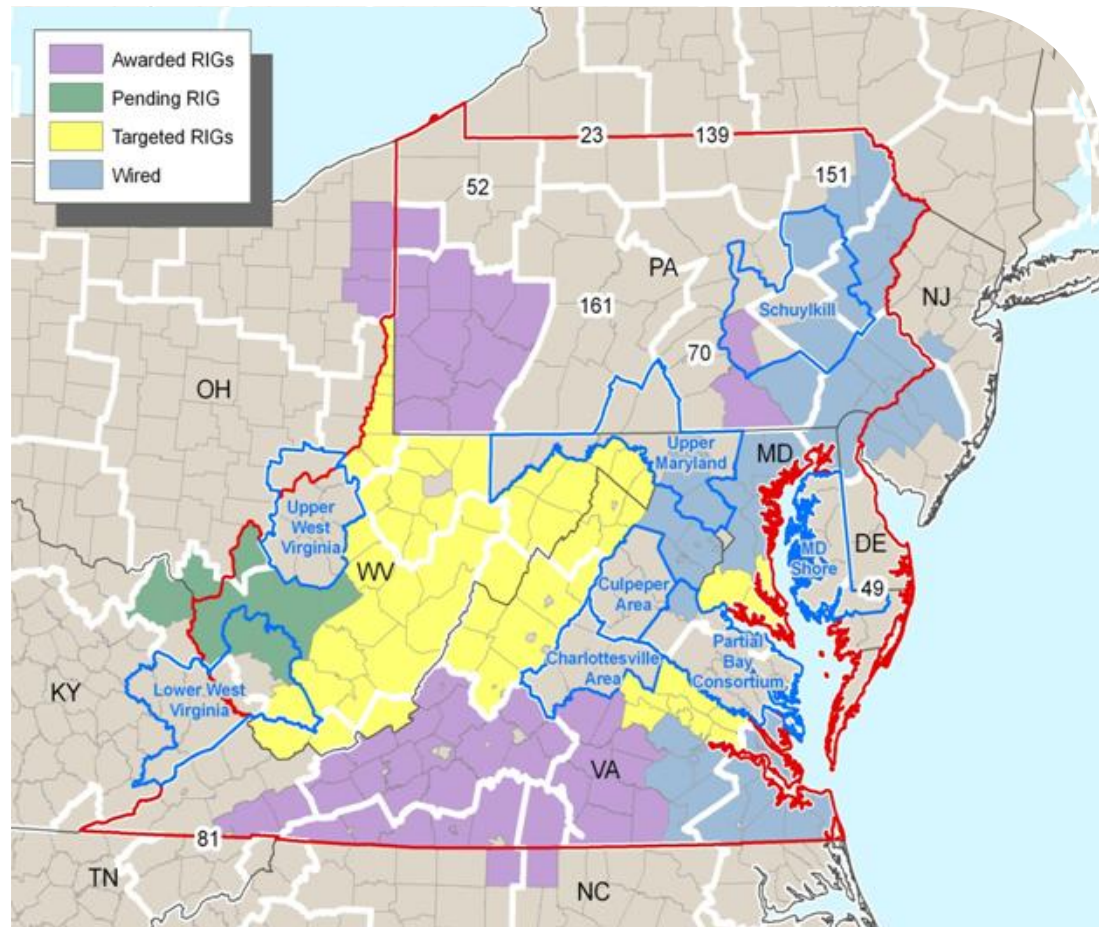


## Analysis of Regions Not Currently Involved in WIRED Grants or RIGs: Culpeper Area

October 2008

### Culpeper Area

Culpeper County, Virginia  
Fauquier County, Virginia  
Madison County, Virginia  
Orange County, Virginia  
Rappahannock County, Virginia





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## About This Report

Chmura Economics & Analytics recognizes that accurate, timely data can be difficult to find. This regional report provides employment, wages, occupations, and skills data that can be used as background for an RIG application.

## Frequently Asked Questions

### What data sources were utilized in the creation of this report?

The data for this report come from a variety of sources. All data are checked, cleaned, combined, organized, and displayed in a way to maximize its usefulness. Yearly employment data in the below charts are based on four-quarter averages. Data for regions outside of Virginia and Ohio are imputed when not disclosed. A few of the sources of data which have been used in the creation of this report are:

- Quarterly Census of Employment and Wages (QCEW)
- Local Area Unemployment Statistics (LAUS)
- Occupation and Industry Forecasts
- Local Employment Dynamics (LED)
- O\*Net
- National Center for Education Statistics
- Occupational Employment Statistics (OES)

### Who is Chmura Economics & Analytics?

Chmura Economics & Analytics (Chmura) is a provider of applied economic consulting, quantitative research, and software solutions requiring the integration of advanced economic analysis. Chmura publishes *Virginia Economic Trends*, *Ohio Economic Trends*, electronic publications, and forecasts available via [www.chmuraecon.com](http://www.chmuraecon.com). Software products include JOBSeq®, WIBeq™, and OnStage.

Chmura has headquarters in Richmond, Virginia and a branch office in Cleveland, Ohio. Chmura Economics & Analytics is committed to achieving 100% customer satisfaction in all project engagements. The Chmura philosophy is that when our customer succeeds, Chmura has been successful. To contact us, send an email to [info@chmuraecon.com](mailto:info@chmuraecon.com).

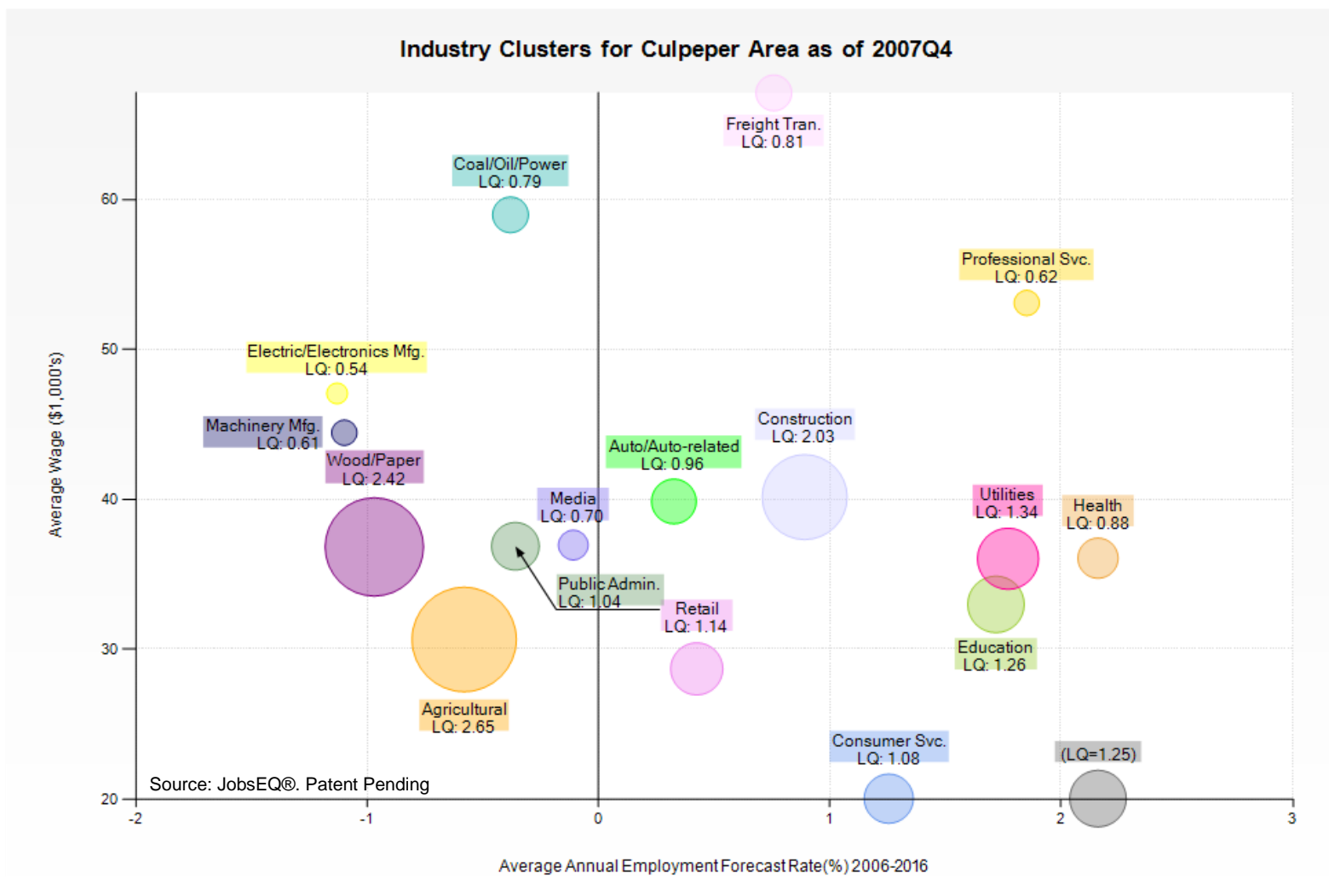


### Executive Summary

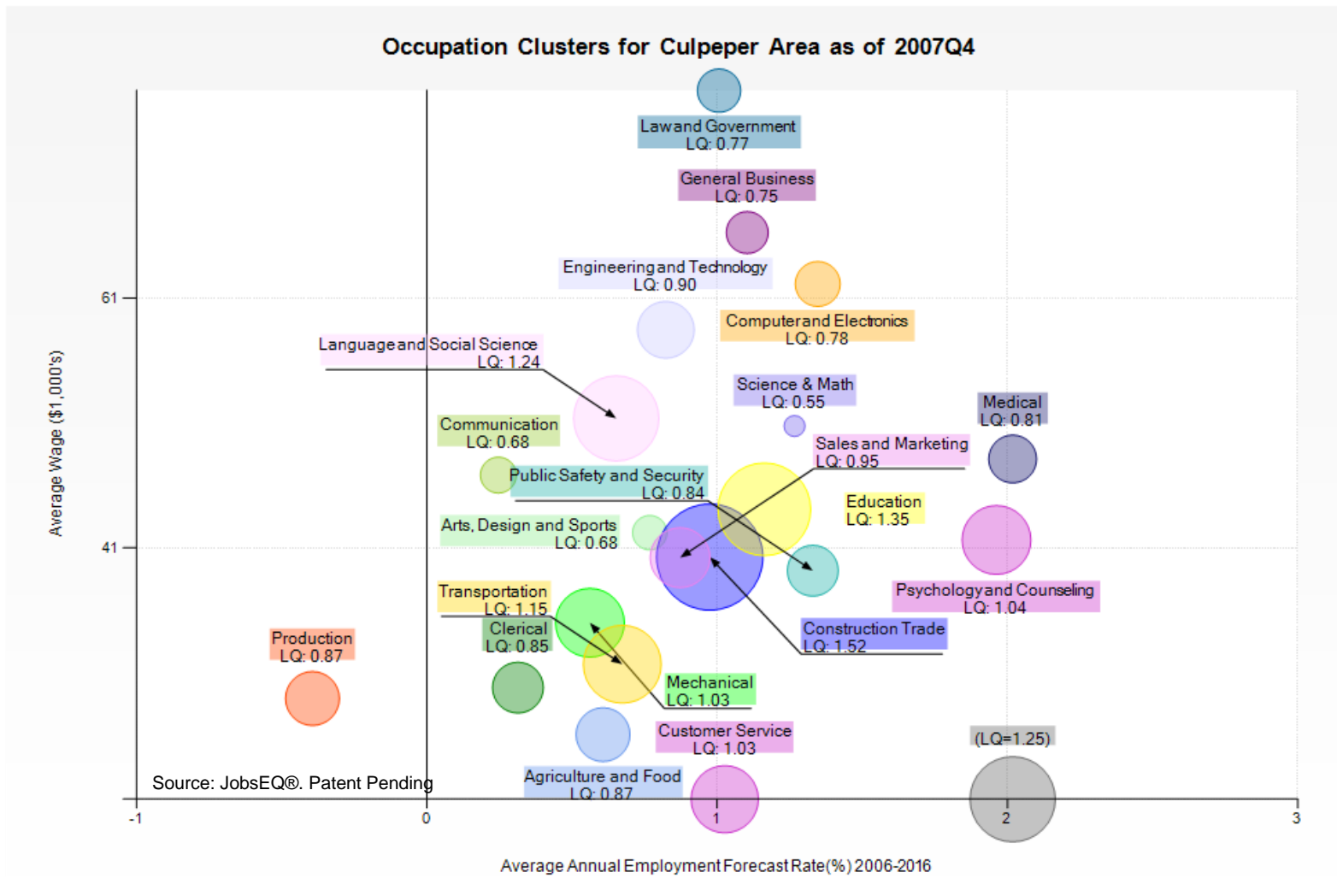
The Culpeper Area is undergoing a fairly quick transition from low to high skilled workers. This transition is apparent in the future skills gap where the surplus of skills far outweighs the shortage of similar skills. The transition may be due, in part, to the region's proximity to Washington DC—lower wages in Culpeper may be attracting spillover businesses while lower home prices may be attracting more residents planning to commute to Northern Virginia and Washington DC for employment. Industries that have shown the largest employment growth include support activities for transportation, warehousing and storage, general merchandise stores, social assistance, and food services. During the fourth quarter of 2007, the largest industry clusters in the region were agriculture, wood/paper, and construction. Construction trades make up the largest occupation cluster.



## Industry and Occupation Clusters



Note: See the appendix for an explanation of how to use industry and occupation cluster charts.





## Employment by Major Sector

Culpeper Area Employment by Major Sector

NAICS	Industry Description	Employment				Employment Change Since 2005		Annual Average Change Since 2002
		2007	2005	2002	Annual Average Wages 2007	Number	Annual Average	
0	Total	50,881	49,526	43,915	\$ 35,489	1,354	1.4%	3.0%
11	Agriculture, Forestry, Fishing and Hunting	1,295	1,446	1,404	\$ 30,336	(151)	-5.4%	-1.6%
21	Mining, Quarrying, and Oil and Gas Extraction	159	137	135	\$ 45,306	22	7.8%	3.3%
22	Utilities	261	254	200	\$ 64,123	6	1.3%	5.5%
23	Construction	6,025	6,622	4,889	\$ 39,635	(598)	-4.6%	4.3%
31	Manufacturing	3,635	3,857	4,111	\$ 40,665	(222)	-2.9%	-2.4%
42	Wholesale Trade	2,260	2,289	1,834	\$ 46,929	(30)	-0.7%	4.3%
44	Retail Trade	7,050	6,591	6,144	\$ 24,237	459	3.4%	2.8%
48	Transportation and Warehousing	2,017	1,610	975	\$ 50,431	407	11.9%	15.7%
51	Information	978	1,100	701	\$ 69,776	(122)	-5.7%	6.9%
52	Finance and Insurance	1,039	995	880	\$ 49,391	44	2.2%	3.4%
53	Real Estate and Rental and Leasing	641	674	392	\$ 32,069	(33)	-2.5%	10.4%
54	Professional, Scientific, and Technical Services	2,375	2,062	2,032	\$ 53,051	313	7.3%	3.2%
55	Management of Companies and Enterprises	313	408	342	\$ 78,316	(96)	-12.5%	-1.8%
56	Administrative and Support and Waste Management and Remediation Services	1,437	1,430	1,516	\$ 28,974	7	0.2%	-1.1%
61	Educational Services	5,829	5,520	5,018	\$ 33,230	309	2.8%	3.0%
62	Health Care and Social Assistance	5,571	5,031	4,746	\$ 35,866	540	5.2%	3.3%
71	Arts, Entertainment, and Recreation	1,033	835	845	\$ 21,650	197	11.2%	4.1%
72	Accommodation and Food Services	4,234	4,016	3,522	\$ 15,262	218	2.7%	3.7%
81	Other Services (except Public Administration)	1,945	1,831	1,805	\$ 29,728	114	3.1%	1.5%
92	Public Administration	2,786	2,818	2,424	\$ 36,538	(32)	-0.6%	2.8%

Employment growth is the broadest and most timely indicator of the general health of an economy.

Information obtained from this table provides insight to questions such as:

- Which industries are posting the largest increases or decreases in employment? What are their average wages—will the trend lead to a decrease or increase in the region's overall wealth?
- Are changes in employment levels cyclical or is a particularly industry in long-term decline? What is driving that trend?

## Top 20 Employers by 3-Digit NAICS

Culpeper Area Top 20 Employers by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change Since 2005		Annual Aver Change Since 2002
		2007	2005	2002		Number	Annual Average	
611	Educational Services	5,829	5,520	5,018	\$ 33,230	309	2.8%	3.0%
722	Food Services and Drinking Places	3,634	3,465	2,949	\$ 14,396	169	2.4%	4.3%
238	Specialty Trade Contractors	3,521	3,946	2,636	\$ 37,978	(425)	-5.5%	6.0%
541	Professional, Scientific, and Technical Services	2,375	2,062	2,032	\$ 53,051	313	7.3%	3.2%
622	Hospitals	1,563	1,443	1,378	\$ 45,266	120	4.1%	2.5%
623	Nursing and Residential Care Facilities	1,530	1,449	1,527	\$ 26,183	81	2.8%	0.0%
621	Ambulatory Health Care Services	1,517	1,348	1,101	\$ 43,934	169	6.1%	6.6%
452	General Merchandise Stores	1,337	1,165	1,135	\$ 17,741	173	7.2%	3.3%
236	Construction of Buildings	1,267	1,395	1,158	\$ 41,353	(127)	-4.7%	1.8%
237	Heavy and Civil Engineering Construction	1,236	1,281	1,095	\$ 42,485	(45)	-1.8%	2.5%
424	Merchant Wholesalers, Nondurable Goods	1,178	1,059	972	\$ 43,509	119	5.5%	3.9%
561	Administrative and Support Services	1,172	1,161	1,277	\$ 27,853	11	0.5%	-1.7%
922	Justice, Public Order, and Safety Activities	1,163	1,100	1,086	\$ 40,512	63	2.8%	1.4%
445	Food and Beverage Stores	1,143	1,088	1,042	\$ 20,426	55	2.5%	1.9%
921	Executive, Legislative, and Other General Government Support	999	930	792	\$ 32,495	70	3.7%	4.8%
624	Social Assistance	961	791	740	\$ 23,374	170	10.2%	5.4%
423	Merchant Wholesalers, Durable Goods	941	1,129	797	\$ 48,976	(188)	-8.7%	3.4%
812	Personal and Laundry Services	909	871	826	\$ 26,466	38	2.1%	1.9%
337	Furniture and Related Product Manufacturing	892	909	933	\$ 32,968	(17)	-0.9%	-0.9%
444	Building Material and Garden Equipment and Supplies Dealers	857	815	476	\$ 28,332	43	2.6%	12.5%

The **North American Industry Classification System** (NAICS) was developed cooperatively between the United States, Canada, and Mexico to provide data users with accurate information pertaining to the economy in the 21st century. The NAICS Code is composed of six digits. The first two digits define the top-level category. The three-digit industries shown above represent components of the major sectors.

Similar to the previous table, information obtained from this table provides insight to questions such as:

- Which industries are posting the largest increases or decreases in employment? What are their average wages—will the trend lead to a decrease or increase in the region's overall wealth?
- Are changes in employment levels cyclical or is a particularly industry in long-term decline? What is driving that trend?



## Industries with Largest Employment Gains and Losses

Culpeper Area Top 20 Industries with Largest Employment Gain by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change Since 2005		Annual Aver Change Since 2002
		2007	2005	2002		Number	Percent	
452	General Merchandise Stores	1,337	1,165	1,135	\$ 17,741	172.67	7.2%	3.3%
624	Social Assistance	961	791	740	\$ 23,374	170.00	10.2%	5.4%
722	Food Services and Drinking Places	3,634	3,465	2,949	\$ 14,396	169.08	2.4%	4.3%
621	Ambulatory Health Care Services	1,517	1,348	1,101	\$ 43,934	168.75	6.1%	6.6%
713	Amusement, Gambling, and Recreation Industries	742	578	674	\$ 15,803	164.33	13.3%	1.9%
424	Merchant Wholesalers, Nondurable Goods	1,178	1,059	972	\$ 43,509	118.67	5.5%	3.9%
623	Nursing and Residential Care Facilities	1,530	1,449	1,527	\$ 26,183	81.08	2.8%	0.0%
921	Executive, Legislative, and Other General Government Support	999	930	792	\$ 32,495	69.67	3.7%	4.8%
441	Motor Vehicle and Parts Dealers	854	787	739	\$ 42,138	66.83	4.2%	2.9%
922	Justice, Public Order, and Safety Activities	1,163	1,100	1,086	\$ 40,512	62.58	2.8%	1.4%
445	Food and Beverage Stores	1,143	1,088	1,042	\$ 20,426	55.33	2.5%	1.9%
332	Fabricated Metal Product Manufacturing	388	336	344	\$ 34,935	51.83	7.4%	2.4%
447	Gasoline Stations	819	769	809	\$ 17,735	49.75	3.2%	0.3%
721	Accommodation	600	551	573	\$ 20,715	48.75	4.3%	0.9%
811	Repair and Maintenance	612	567	528	\$ 35,669	45.50	3.9%	3.0%
453	Miscellaneous Store Retailers	434	389	304	\$ 17,845	45.00	5.6%	7.4%
522	Credit Intermediation and Related Activities	672	629	608	\$ 45,165	43.08	3.4%	2.0%
488	Support Activities for Transportation	nd	nd	nd	nd	nd	nd	nd
493	Warehousing and Storage	nd	nd	nd	nd	nd	nd	nd
335	Electrical Equipment, Appliance, and Component Manufacturing	nd	nd	nd	nd	nd	nd	nd

Information obtained from the table above identifies the industries that are adding the largest number of jobs which translates into those creating the greatest demand for new workers.

## Culpeper Area Top 20 Industries with Largest Employment Loss by 3-Digit NAICS

NAICS	Industry Description	Employment			Employment Change Since 2005			Annual Aver Change Since 2002
		2007	2005	2002	Annual Aver Wages 2007	Number	Annual Average	
926	Administration of Economic Programs	129	352	150	\$ 27,971	(222)	-39.3%	-2.9%
423	Merchant Wholesalers, Durable Goods	941	1,129	797	\$ 48,976	(188)	-8.7%	3.4%
236	Construction of Buildings	1,267	1,395	1,158	\$ 41,353	(127)	-4.7%	1.8%
551	Management of Companies and Enterprises	313	408	342	\$ 78,316	(96)	-12.5%	-1.8%
115	Support Activities for Agriculture and Forestry	185	252	237	\$ 27,721	(67)	-14.4%	-4.8%
237	Heavy and Civil Engineering Construction	1,236	1,281	1,095	\$ 42,485	(45)	-1.8%	2.5%
484	Truck Transportation	413	454	519	\$ 40,136	(40)	-4.6%	-4.5%
327	Nonmetallic Mineral Product Manufacturing	259	294	292	\$ 47,288	(35)	-6.2%	-2.4%
442	Furniture and Home Furnishings Stores	149	176	163	\$ 24,656	(26)	-7.8%	-1.7%
511	Publishing Industries (except Internet)	186	204	199	\$ 41,428	(19)	-4.6%	-1.3%
113	Forestry and Logging	55	69	93	\$ 31,706	(14)	-10.4%	-9.8%
312	Beverage and Tobacco Product Manufacturing	146	159	135	\$ 27,193	(13)	-4.1%	1.6%
311	Food Manufacturing	74	84	112	\$ 32,367	(11)	-6.4%	-8.0%
562	Waste Management and Remediation Services	265	269	238	\$ 34,059	(4)	-0.7%	2.2%
928	National Security and International Affairs	3	4	2	\$ 40,845	(2)	-23.5%	5.3%
446	Health and Personal Care Stores	nd	nd	nd	nd	nd	nd	nd
322	Paper Manufacturing	nd	nd	nd	nd	nd	nd	nd
313	Textile Mills	nd	nd	nd	nd	nd	nd	nd
316	Leather and Allied Product Manufacturing	nd	nd	nd	nd	nd	nd	nd
481	Air Transportation	nd	nd	nd	nd	nd	nd	nd

Information obtained from the table above identifies the industries that are shedding the largest number of workers which translates into the number of people who are likely looking for jobs in the region or in need of retraining.

## Declining Occupations

Culpeper Area Top 20 Declining Occupations Based on Top 20 Declining Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007	Employment Change Since 2005		Annual Aver Change Since 2002
		2007	2005	2002		Number	Annual Average	
Sales Representatives, Wholesale and Mfg, Ex Technical and Scientific Products	41-4012	198	245	184	\$ 56,561	(47)	-10.1%	1.5%
Paper Goods Machine Setters, Operators, and Tenders	51-9196	13	60	73	\$ 30,339	(47)	-53.0%	-28.9%
Carpenters	47-2031	399	435	359	\$ 40,244	(36)	-4.2%	2.2%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	164	199	175	\$ 23,902	(35)	-9.2%	-1.3%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	376	410	418	\$ 36,008	(34)	-4.2%	-2.1%
Office Clerks, General	43-9061	174	204	167	\$ 25,090	(30)	-7.7%	0.8%
Construction Laborers	47-2061	417	443	376	\$ 32,439	(26)	-3.0%	2.1%
Truck Drivers, Light or Delivery Services	53-3033	146	170	149	\$ 27,868	(24)	-7.4%	-0.5%
First-Line Supervisors/Mgrs of Construction Trades and Extraction Workers	47-1011	265	288	241	\$ 57,055	(23)	-4.1%	1.9%
Industrial Truck and Tractor Operators	53-7051	60	81	80	\$ 29,280	(21)	-14.1%	-5.7%
Bookkeeping, Accounting, and Auditing Clerks	43-3031	97	115	98	\$ 32,265	(18)	-8.3%	-0.2%
Maintenance and Repair Workers, General	49-9042	62	80	76	\$ 35,131	(18)	-12.0%	-4.1%
General and Operations Mgrs	11-1021	115	133	115	\$ 102,564	(18)	-6.9%	0.0%
First-Line Supervisors/Mgrs of Production and Operating Workers	51-1011	35	52	59	\$ 50,619	(17)	-17.7%	-9.9%
Industrial Machinery Mechanics	49-9041	25	39	45	\$ 41,272	(14)	-20.4%	-11.2%
Police and Sheriff's Patrol Officers	33-3051	8	22	10	\$ 48,534	(14)	-39.1%	-2.8%
Correctional Officers and Jailers	33-3012	8	22	9	\$ 38,708	(14)	-39.1%	-2.8%
Team Assemblers	51-2092	36	49	42	\$ 25,951	(13)	-14.5%	-2.9%
Shipping, Receiving, and Traffic Clerks	43-5071	46	59	48	\$ 28,207	(13)	-11.4%	-0.8%
Retail Salespersons	41-2031	115	127	120	\$ 27,058	(12)	-5.0%	-0.9%

The **Standard Occupational Classification** (SOC) system is used by all Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. Each occupation group includes detailed occupation(s) requiring similar job duties, skills, education, or experience. This system is provided by the U.S. Department of Labor, Bureau of Labor Statistics.

The table above identifies the most prevalent occupations in the regional industries shedding the most workers over the past year. The occupations on this list identify those that are in need of retraining or transferring to other industries.

## Culpeper Area Top 20 Declining Occupations Based on All Industries

Occupation Description	SOC	Employment				Annual Aver Wages	Employment		Annual Aver Change Since 2002 Q4
		2007 Q4	2006 Q4	2002 Q4	2007 Q4		Number	Percent	
Carpenters	47-2031	565	635	508	\$ 39,816	(70)	-11.1%	2.1%	
Construction Laborers	47-2061	678	721	581	\$ 31,377	(42)	-5.9%	3.2%	
First-Line Supervisors/Mgrs of Construction Trades and Extraction Workers	47-1011	524	564	450	\$ 56,551	(40)	-7.1%	3.1%	
Sales Representatives, Wholesale and Mfg, Except Technical and Scientific Produc	41-4012	540	565	455	\$ 55,526	(25)	-4.5%	3.5%	
Electricians	47-2111	381	405	344	\$ 46,190	(23)	-5.8%	2.1%	
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	132	154	144	\$ 25,037	(23)	-14.7%	-1.8%	
Cabinetmakers and Bench Carpenters	51-7011	87	106	93	\$ 28,685	(19)	-18.1%	-1.3%	
Plumbers, Pipefitters, and Steamfitters	47-2152	276	293	235	\$ 45,795	(17)	-5.7%	3.2%	
Helpers--Carpenters	47-3012	111	127	99	\$ 24,591	(16)	-12.7%	2.2%	
Construction Mgrs	11-9021	187	202	166	\$ 80,201	(14)	-7.2%	2.5%	
Cement Masons and Concrete Finishers	47-2051	147	159	120	\$ 36,020	(12)	-7.6%	4.2%	
Team Assemblers	51-2092	257	268	237	\$ 26,134	(12)	-4.4%	1.6%	
Nursing Aides, Orderlies, and Attendants	31-1012	618	630	546	\$ 22,324	(12)	-1.9%	2.5%	
Stock Clerks and Order Fillers	43-5081	710	722	567	\$ 22,923	(12)	-1.6%	4.6%	
Operating Engineers and Other Construction Equipment Operators	47-2073	284	295	237	\$ 41,927	(11)	-3.8%	3.7%	
Packers and Packagers, Hand	53-7064	270	281	237	\$ 20,141	(11)	-3.8%	2.7%	
Truck Drivers, Light or Delivery Services	53-3033	427	437	375	\$ 26,098	(10)	-2.4%	2.7%	
Brickmasons and Blockmasons	47-2021	80	90	62	\$ 44,130	(10)	-11.5%	5.2%	
Painters, Construction and Maintenance	47-2141	147	157	111	\$ 33,812	(10)	-6.5%	5.8%	
Security Guards	33-9032	187	196	157	\$ 24,483	(9)	-4.6%	3.6%	

The table above identifies the most prevalent occupations that are declining from ALL industries in the region. The occupations on this list identify those that are in need of retraining or transferring to other industries.

## Growing Occupations

Culpeper Area Top 20 Growing Occupations Based on All Industries

Occupation Description	SOC	Employment			Annual Average Wages 2007 Q4	Employment Change		Annual Average Change Since 2002 Q4
		2007 Q4	2006 Q4	2002 Q4		Number	Percent	
Waiters and Waitresses	35-3031	1,087	1,007	827	\$ 16,993	80	8.0%	5.6%
Retail Salespersons	41-2031	1,527	1,489	1,217	\$ 24,080	39	2.6%	4.7%
Cooks, Restaurant	35-2014	411	379	314	\$ 20,743	33	8.6%	5.5%
Registered Nurses	29-1111	723	695	616	\$ 59,517	27	3.9%	3.2%
Elementary School Teachers, Except Special Education	25-2021	1,086	1,066	954	\$ 48,699	20	1.8%	2.6%
Child, Family, and School Social Workers	21-1021	138	122	105	\$ 40,080	17	13.6%	5.7%
Personal and Home Care Aides	39-9021	156	140	112	\$ 19,038	16	11.8%	6.9%
Hairdressers, Hairstylists, and Cosmetologists	39-5012	149	134	119	\$ 24,962	15	11.4%	4.6%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	35-9031	171	156	127	\$ 16,662	15	9.6%	6.1%
Teacher Assistants	25-9041	726	712	645	\$ 21,723	14	1.9%	2.4%
Receptionists and Information Clerks	43-4171	374	361	296	\$ 23,103	13	3.6%	4.8%
Secondary School Teachers, Except Special and Vocational Education	25-2031	718	705	631	\$ 51,197	13	1.8%	2.6%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	945	933	589	\$ 23,601	12	1.3%	9.9%
Maids and Housekeeping Cleaners	37-2012	356	345	332	\$ 18,835	10	3.0%	1.4%
Bus Drivers, School	53-3022	491	481	429	\$ 24,657	10	2.1%	2.7%
Amusement and Recreation Attendants	39-3091	127	119	109	\$ 17,394	9	7.4%	3.3%
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	904	895	772	\$ 16,236	9	1.0%	3.2%
Police and Sheriff's Patrol Officers	33-3051	179	171	154	\$ 48,522	8	4.9%	3.0%
Cooks, Fast Food	35-2011	258	250	215	\$ 15,897	8	3.3%	3.7%
Dishwashers	35-9021	178	170	143	\$ 16,144	8	4.8%	4.6%

The table above identifies the most prevalent occupations that are in demand for the industries in the region that are showing the largest employment growth.

## Forecast Occupation Gaps

Culpeper Area Gaps in Top 20 Occupations (Requiring 2-Year Degree or Greater) Over Next 7 Years

Occupation Description	SOC	Annual Occupation Gaps	Employment			Annual Aver Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
Registered Nurses	29-1111	9	723	695	616	\$ 59,509
Teacher Assistants	25-9041	7	726	712	645	\$ 21,769
Elementary School Teachers, Ex Special Ed	25-2021	5	1,086	1,066	954	\$ 48,704
Bookkeeping, Accounting, and Auditing Clerks	43-3031	5	564	567	483	\$ 31,483
Licensed Practical and Licensed Vocational Nurses	29-2061	5	329	328	281	\$ 37,217
Sales Representatives, Services, All Other	41-3099	4	219	216	193	\$ 43,548
Preschool Teachers, Ex Special Ed	25-2011	3	178	174	173	\$ 27,040
Executive Secretaries and Admin Assistants	43-6011	3	275	270	221	\$ 38,809
Medical Assistants	31-9092	3	105	100	81	\$ 26,852
Sales Representatives, Wholesale and Mfg, Ex Technical and Scientific Products	41-4012	2	540	565	455	\$ 55,526
First-Line Supervisors/Mgrs of Office and Admin Support Workers	43-1011	2	448	449	377	\$ 45,280
Accountants and Auditors	13-2011	2	277	275	236	\$ 60,014
Child, Family, and School Social Workers	21-1021	2	138	122	105	\$ 40,178
Social and Human Service Assistants	21-1093	2	75	69	72	\$ 27,679
Business Operations Specialists, All Other	13-1199	2	238	234	208	\$ 59,699
Mental Health Counselors	21-1014	1	54	50	56	\$ 38,241
Rehabilitation Counselors	21-1015	1	67	62	76	\$ 31,107
Cost Estimators	13-1051	1	103	111	87	\$ 57,289
Computer Software Engineers, Applications	15-1031	1	136	133	143	\$ 79,989
Hairdressers, Hairstylists, and Cosmetologists	39-5012	1	149	134	119	\$ 24,968

The **Gap** forecasts the average annual number of individuals needed in the occupation beyond the supply of new workers. It includes changes due to replacements. For example, consider the case in which a retail salesperson gets a degree, leaves their occupation, and becomes a financial analyst. This turnover dictates that a new retail salesperson is needed. Even though the total number of retail salespersons in the region is unchanged, the gap counts this situation as an increase of one in demand for retail salesperson. It also includes expected changes due to worker preferences and wages.

This table provides insight into the occupations that typically require a 2-year degree or greater that are expected to be in greatest demand.

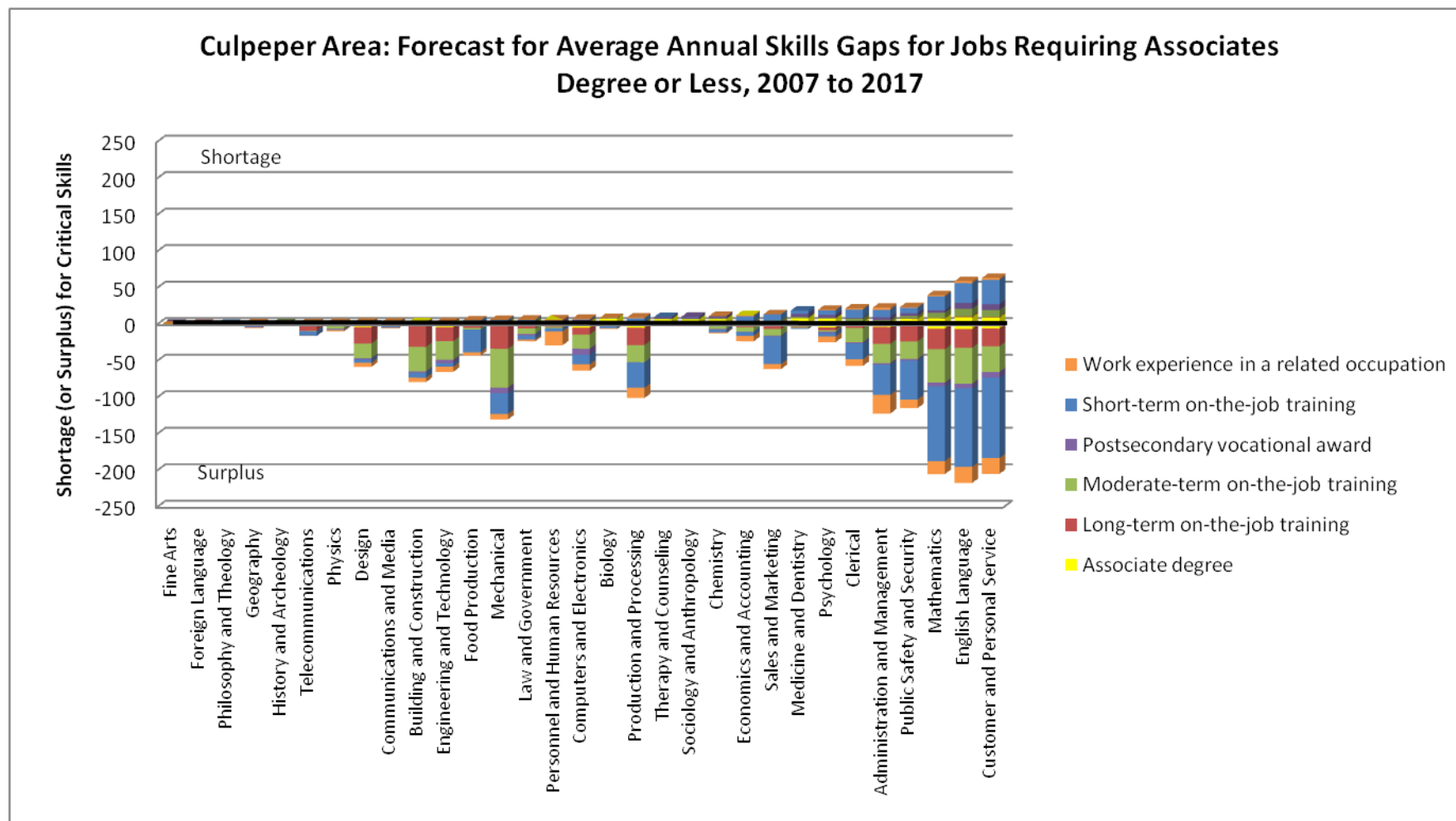


**Culpeper Area Gaps in Top 20 Occupations (Requiring Less than 2-Year Degree) Over Next 7 Years**

SOC	Occupation Description	Annual Occupation Gaps	Employment			Annual Aver Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
43-9061	Office Clerks, General	14	1,189	1,193	986	\$ 24,936
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	10	780	776	785	\$ 22,191
41-2031	Retail Salespersons	10	1,527	1,489	1,217	\$ 24,080
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	7	904	895	772	\$ 16,236
39-9021	Personal and Home Care Aides	7	156	140	112	\$ 19,038
31-1011	Home Health Aides	7	192	198	183	\$ 20,127
43-4051	Customer Service Representatives	6	687	695	624	\$ 28,582
31-1012	Nursing Aides, Orderlies, and Attendants	5	618	630	546	\$ 22,333
53-3032	Truck Drivers, Heavy and Tractor-Trailer	5	654	661	611	\$ 35,480
43-4171	Receptionists and Information Clerks	5	374	361	296	\$ 23,103
37-2012	Maids and Housekeeping Cleaners	5	356	345	332	\$ 18,835
33-9032	Security Guards	3	187	196	157	\$ 24,581
37-3011	Landscaping and Groundskeeping Workers	3	335	331	326	\$ 22,890
53-3033	Truck Drivers, Light or Delivery Services	3	427	437	375	\$ 26,117
41-2021	Counter and Rental Clerks	2	212	214	188	\$ 22,075
53-3022	Bus Drivers, School	2	491	481	429	\$ 24,657
39-3091	Amusement and Recreation Attendants	2	127	119	109	\$ 17,394
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	1	481	484	416	\$ 38,249
43-6013	Medical Secretaries	1	80	77	63	\$ 30,151
31-9091	Dental Assistants	1	76	73	62	\$ 30,842

This table provides insight into the occupations that typically require less than a 2-year degree that are expected to be in greatest demand.

## Forecast Skill Needs



The chart above identifies the skills needed for the gap occupations identified on the previous page that typically require less than a 2-year degree.

## Appendix: Clusters

Cluster charts display a geographic concentration of interrelated industries or occupations.

- **Cluster**
  - Industry clusters can form and grow because of a region's competitive advantage—resources such as location, trained labor, and education systems.
  - Occupation clusters describe the specialization of a region's workforce.
- **Location Quotient - (LQ)** This value is shown by the size of the circle; the larger the circle, the larger the location quotient.
  - A location quotient greater than 1.0 indicates that the region has a higher concentration of employment in a particular industry or occupation than the nation; a location quotient less than 1 indicates the region has a lower concentration of employment in the cluster than the nation.
  - If a regional industry group has a location quotient of 1.25 or higher, it is considered to possess a *Competitive Advantage* in that industry.
  - Only industries or occupations with an LQ higher than .5 are shown in the clusters chart.
  - Nondisclosure - if cluster data are nondisclosable, a range will be given for the LQ.
- **Average Wages** - This value is shown on the vertical axis. The higher the circle is shown on the chart, the higher the average wages in that cluster.
- **Forecast Growth** - The forecast growth rate for a cluster is the annual average percentage change in employment expected over the given period. This value is shown along the horizontal axis. The further to the right a cluster's circle is shown, the greater the growth expected in that cluster. The expected growth is based upon a long-range national industry and occupation forecast and may not reflect short-term and regional fluctuations.